IN THE CLAIMS

Please amend the claims as follows:

Claims 1-20 (Cancelled)

Claim 21 (Currently Amended): A method for determining the two-dimensional coordinates of sequential cross-sectional slices of a fiber bundle which may be used to form a chip or a micro-array comprising:

~~position of each fiber unit in each slice that comprises a fiber alignment, the method comprising the steps of:~~

(a) producing a series of sequential cross-sectional slices of a bundle of adhered linearly-aligned fibers, wherein each sequential slice comprises multiple fiber units that are bound or immobilized to each other, and each bound or immobilized fiber unit is produced by the cross-sectional slicing of the individual fibers in the bundle,

wherein each fiber in the bundle contains a probe and/or a marker, and the bundle contains two or more fibers containing a marker (marker fibers),

~~cutting sequentially a fiber alignment obtained by binding and immobilizing fibers, to obtain a series of fiber alignment slices S(1), S(2), ... S(h), ... S(m)~~;

(b) ~~selecting any given~~ determining the two-dimensional coordinates of each fiber unit within a fiber alignment slice S(h) using the coordinates of the fiber units formed by said two or more marker fibers as coordinate reference points

~~from m number of slices, and determining two-dimensional coordinates for each fiber unit contained in said slice S(h), based on the coordinate reference points in said slice S(h)~~;

(c) determining the two-dimensional coordinates of ~~the~~ each fiber unit corresponding to those in fiber alignment slice S(h) which are in an adjacent or sequential fiber alignment slice S(i) of said fiber bundle, based on the coordinate data obtained for fiber

alignment slice S(h) in step (b) and based on the positions of the coordinate reference points in the adjacent or sequential fiber alignment slice

~~contained in slice S(i) located adjacent to said slice S(h), based on the coordinate data of slice S(h) obtained in step (b) and the coordinate reference points in said slice S(i)~~; and

(d) repeating steps (b) and (c) to determine the two-dimensional coordinates of ~~each~~ fiber units in one or more successive or ~~and~~ adjacent fiber alignment slices of said fiber bundle

~~, S(j), S(k), ...S(m), that comprise a fiber alignment, and wherein each slice comprises fiber units and reference points~~.

Claims 22-59 (Cancelled).

Claim 60 (Previously Presented): The method of claim 21, wherein, in step (b), the two-dimensional coordinates of each fiber unit in slice S(h) are first determined relative to an XY plane, and the resulting values are then translated into a coordinate system based on the coordinate reference points in said slice S(h), to form translated coordinates for each fiber in slice S(h).

Claim 61 (Previously Presented): The method of claim 60, wherein, in step (c), the two-dimensional coordinates of each fiber unit in slice S(i) are first determined relative to an XY plane, using the corresponding translated coordinates for each fiber in slice S(h), and the resulting values are then translated into a coordinate system based on the coordinate reference points in said slice S(i).

Claim 62 (Previously Presented): The method of claim 21, wherein said fibers are selected from the group consisting of hollow fibers incorporating an immobilized biological substance, porous fibers incorporating an immobilized biological substance, and porous hollow fibers incorporating an immobilized biological substance, wherein the biological substance is directly immobilized on the fiber, in the fiber, or both on and in the fiber.

Claim 63 (Previously Presented): The method of claim 21, wherein said fibers are fibers retaining a gel which incorporates an immobilized biological substance, whereby the biological substance is immobilized on the fiber, in the fiber, or both on and in the fiber.

Claim 64 (Previously Presented): The method of claim 63, wherein said fibers are selected from the group consisting of solid fibers, hollow fibers, porous fibers and hollow porous fibers.

Claim 65 (Previously Presented): The method of claim 64, wherein said fibers are solid fibers, and wherein the gel incorporating an immobilized biological substance is retained on a surface of the fibers.

Claim 66 (Previously Presented): The method of claim 64, wherein said fibers are hollow fibers, and wherein the gel incorporating an immobilized biological substance is retained in a hollow part of the fibers.

Claim 67 (Previously Presented): The method of claim 64, wherein said fibers are porous fibers, and wherein the gel incorporating an immobilized biological substance is retained in the pore(s) of the fibers.

Claim 68 (Previously Presented): The method of claim 64, wherein said fibers are porous hollow fibers, and wherein the gel incorporating an immobilized biological substance is retained in a hollow part and the pore(s) of the fibers.

Claim 69 (Previously Presented): The method of claim 62, wherein the biological substance is any one selected from a group consisting of the following substances (a) to (c):

(a) nucleic acid, amino acid, sugar or lipid;

(b) a polymer consisting of one or more kinds of ingredients from the substances stated in (a) above; and

(c) a substance interacting with substances stated in (a) or (b) above.

Claim 70 (Previously Presented): The method of claim 69, wherein the biological substance is nucleic acid.

Claim 71 (Previously Presented): The method of claim 63, wherein the biological substance is any one selected from a group consisting of the following substances (a) to (c):

(a) nucleic acid, amino acid, sugar or lipid;

(b) a polymer consisting of one or more kinds of ingredients from the substances stated in (a) above; and

(c) a substance interacting with substances stated in (a) or (b) above.

Claim 72 (Previously Presented): The method of claim 71, wherein the biological substance is nucleic acid.

Claim 73 (Previously Presented): The method of claim 63, wherein said fibers also have a pigment retained on the fiber, in the fiber or both on and in the fiber, by means of the gel.

Claim 74 (New): The method of claim 63, wherein said fiber bundles contain 100 or more individual fibers.

Claim 75 (New): The method of claim 63, wherein said fiber bundles contain 1000 to 10,000,000 individual fibers.

Claim 76 (New): The method of claim 63, wherein said fiber bundles have a fiber density ranging from 100 to 1,000,000 fibers per cm^2.

Claim 77 (New): The method of claim 63, wherein the thickness of the fibers is 1 mm or less.

Claim 78 (New): A method for determining the two-dimensional coordinates of sequential cross-sectional slices of a fiber bundle which may be used to form a chip or a micro-array comprising:

(a) producing a series of sequential cross-sectional slices of a bundle of adhered linearly-aligned fibers, wherein each sequential slice comprises multiple fiber units that are bound or immobilized to each other, and each bound or immobilized fiber unit is produced by the cross-sectional slicing of the individual fibers in the bundle,

wherein each fiber in the bundle contains a probe and/or a marker, and

the bundle contains two or more coordinate reference points;

(b) determining the two-dimensional coordinates of each fiber unit within a fiber alignment slice S(h) using the coordinate reference points;

(c) determining the two-dimensional coordinates of each fiber unit corresponding to those in fiber alignment slice S(h) which are in an adjacent or sequential fiber alignment slice S(i) of said fiber bundle, based on the coordinate data obtained for fiber alignment slice S(h) in step (b) and based on the positions of the coordinate reference points in the adjacent or sequential fiber alignment slice; and

(d) repeating steps (b) and (c) to determine the two-dimensional coordinates of fiber units in one or more successive or adjacent fiber alignment slices of said fiber bundle.